

Ethnographies of Large-Scale Systems: How to study distributed, emerging and complex sociotechnical systems

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Workshop Organizers and Moderators

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OBJECTIVES

We have arranged this session to open discussion and sharing around common experiences, approaches and outcomes of ethnographic studies of large-scale systems. The rich and detailed ‘thick descriptions’ produced by ethnographers have contributed to the understanding of human-computer interactions, meanings and cultures of the digital environment, and practices of technology use. Ethnography has traditionally focused on a site, a geographically localized community or particular workplaces. However, in an increasingly computer mediated and networked world, ethnographers have had to adapt their methods, their sites of investigation and their objects of analysis. We have many shorthands for these difficulties: distribution, scale, heterogeneous expertises, multiple membership, etc. Often these difficulties are precisely what our research attempts to address but only rarely do we give ourselves leeway to discuss how they affect our own practice.

The five participants in this interactive panel will share strategies, problems, and field experiences from their own studies of large scale systems. Exemplars told as experiences, stories and narratives, are ideal devices for capturing and conveying the complexities of real world field research. These exemplars will serve as the

material for an open discussion. Our participants were selected both for their *diverse* modes of interface with their objects of study and a *shared* commitment to ethnography and information systems. This includes a range of ‘sites’ stretching from funding and the policy sphere, to the activities of design and implementation, to studying actual use of production quality systems.

STRUCTURE

The session will begin with participants’ brief presentations recounting a single exemplary experience, approach or method in studying large-scale systems and the research questions these activities have generated. The format will be “5:3:1”, that is, a five minute presentation using no more than three slides in order to address a single concept, idea or to illustrate a story. We will then open the floor to discussion amongst presenters and with the audience.

The goal for this session is for the experiences and methods themselves to act as common starting points for a collective discussion of ethnographic approaches to large scale systems. Topics will emerge organically from discussion.

This said, below are some of the topics we expect will come to structure the conversation:

- Traditions of ethnography: e.g., historical ethnography, multi-sited ethnography, virtual ethnography and so on
- Multi-method approaches: quantitative and network methods
- Multi-investigator teams
- Comparative studies
- Longitudinal studies
- Venues for communicating approaches and findings back to our colleagues
- Traditions of 'objective' and 'subjective' research
- Methods or best-practices for investigation
- Funding opportunities and dangers
- Developing long-term partnerships

PARTICIPANTS

David Ribes is a faculty member in Georgetown University's Communication, Culture and Technology Program. Trained in sociology and Science Studies at UC San Diego, he completed his post-doc at University of Michigan's School of Information. Throughout his academic career David has been an 'ethnographer of cyberinfrastructure' -- large scale information infrastructure for the sciences. His dissertation research focused on the practical work of participants in the GEON project (cyberinfrastructure for the earth sciences) and since then he has continued his explorations of ethnographic methods for studying large-scale systems.

Steven Jackson is a faculty member in the University of Michigan School of Information and coordinator of the school's Information Policy (IPOL) program. His work addresses policy and practice in large-scale collaborative science, information infrastructure and democratic practice in public sector

organizations, and analyses of the design and use of information technologies in international development settings.

Marina Jirotko is Director of the Centre for Requirements Engineering, Associate Director of the Oxford e-Research Centre and Associate Researcher of the Oxford Internet Institute. Her research interests have long been concerned with bringing a richer comprehension of socially organized work practice into the process of engineering technological systems with a focus on supporting everyday work and interaction.

Early on in her career she developed the use of video-based ethnographic research for use in Requirements Engineering. This work was done in collaboration with BT and helped solve problems for City of London trading rooms, service centers and control rooms.

Bonnie Nardi is a faculty member in the Bren School of Information and Computer Sciences at UC Irvine. An anthropologist, she is interested in innovative social uses of the Internet. She has studied instant messaging, blogging, and other forms of computer-mediated communication, as well as face to face communication. She is the author of three books, an edited collection and many articles. Her latest book, *My Life as a Night Elf Priest: An Anthropological Account of World of Warcraft*, will be published by the University of Michigan Press, June 2010.

Susan Leigh Star is Doreen Boyce Chair in Library and Information Science at the School of Information Sciences at the University of Pittsburgh. For many years she has worked with computer and information scientists, with whom she has studied work, practice, organizations, scientific communities and their decisions, and the social/moral aspects of information infrastructure. Her latest book is a co-edited collection with Martha Lampland, entitled *Standards and Their Stories: How Standardization, Quantification and Formalization Shape Everyday Life* (Cornell U.. Press, 2009).